

SAN PEDRO BAY PORTS

CLEAN AIR ACTION PLAN

Clean Air Action Plan Implementation Progress Report Fourth Quarter 2019

ACCOMPLISHMENTS

GENERAL

- The Ports will hold their eighth CAAP Implementation Advisory Working Group meeting on January 15, 2020 at the Port of Los Angeles' Harbor Administration Building in San Pedro, California. Future meetings will continue to occur on a quarterly basis.

TRUCKS

- **2018 Tariff Modification.** As of October 1, 2018. All new trucks entering the Port Drayage Truck Registry (PDTR) must meet 2014 model year or better. As of the end of the fourth quarter, more than 4,300 "2014 Model Year" or newer trucks have been added to the PDTR since the tariff change went into effect.
- **Truck Rate Study.** The draft economic study for the truck rate (Study) was released on December 17, 2019 to the public on the Ports' [Clean Air Action Plan website](#). The following day on December 18, 2019, the Ports held a workshop at the Bob Foster Civic Chambers at Long Beach City Hall discussing the draft Study. The workshop was webcast live at www.polb.com/webcast. It included a staff presentation on the proposed rate and a timeline of consideration. Stakeholders were informed that the Ports would be accepting written comments on the draft Study until January 31, 2020. Also, the Ports plan to discuss the proposed rate and the study at the January CAAP Implementation Advisory Working Group meeting, before the comment submittal date.
- **Rate Collection Mechanism.** In anticipation of the Truck Rate, the Ports released a Request for Proposals (RFP) in First Quarter 2019 which included minimum requirements for how to collect a rate from Beneficial Cargo Owners. The Ports have tentatively selected a contractor and are negotiating the contract for services. The Ports plan to bring separate contracts to their respective Boards of Harbor Commissioners (Boards) for consideration in Second Quarter of 2020.
- **Large-Scale Zero Emission Truck Deployment Pilot Project.** The Ports are developing a Concept Paper for a large-scale deployment of 50 to 100 zero-emission trucks operating in routine duty cycles at the Ports. This project will evaluate the operational feasibility of zero-emission trucks in standard drayage operations, the ability of truck manufacturers to produce and support larger numbers of zero-emission trucks, and the availability of supporting infrastructure capable of servicing a larger fleet. The Ports are finalizing the Concept Paper, which will be used to help secure the necessary funding. The Final Concept Paper is expected to be completed First Quarter 2020.

- **Early Deployment and Demonstrations.** The Ports continue to manage several grant-funded demonstrations of zero-emissions trucks, including over 20 hydrogen fuel-cell or battery electric trucks as part of supply-chain pilots. The Ports have also committed to supporting regional demonstrations. This includes the deployment of 0.02g NOx/bhp-hr natural gas drayage trucks through a California Energy Commission (CEC) grant secured by South Coast Air Quality Management District (AQMD) that is expected to fund up to 140 low NOx trucks. AQMD is contracting with trucking companies to deploy the low NOx trucks; approximately 18 are registered in the Ports' PDTR and the rest are expected to be deployed in 2020.

TERMINAL EQUIPMENT

Early Deployment and Demonstrations. The Ports continue to manage several grant funded demonstration projects, including ultra-low NOx and electric yard tractors, electric top handlers, and electric rubber-tired gantry cranes, as well as innovative approaches to charging infrastructure and demonstrations of supporting electrical infrastructure, including micro-grid controls with distributed generation and battery storage. The Port of Long Beach (POLB) has received three top handlers, and one battery-electric yard tractor under the C-Port grant. The top handlers will begin demonstration in Q1 2020 at Long Beach Container Terminal (LBCT) and Pier J, SSA Marine, and the battery-electric yard tractor demonstration is underway at LBCT. In addition, POLB, the California Air Resources Board (CARB), and LBCT decided to discontinue the Sinotruk fuel-cell yard tractor demonstration that was to be deployed under the CARB funded C-Port grant. Unfortunately, the yard tractor did not meet Port performance requirements, and there were insurmountable safety concerns related to yard tractor design. The fuel cell technology itself was not a barrier to implementation, and staff will continue to explore promising hydrogen-fueled zero emission cargo-handling equipment in the future. At the Port of Los Angeles (POLA), Pasha has placed 2 battery-electric yard tractors and 1 battery-electric heavy duty forklift in service and has demonstrated the ShoreKat treatment system while vessels are at berth. Additionally, Everport received 2 battery electric Taylor top handlers and 5 battery-electric yard tractors. The Ports continue to work with technology vendors and their selected, third-party Nationally Recognized Testing Laboratories to conduct field evaluations in order to address modifications required to certify the electric vehicle supply equipment (EVSE).

SHIPS

- **Vessel Speed Reduction Enhancements.** The Ports are continuing outreach to the shipping lines to explore ways of enhancing participation at the 40 nm marker for vessel speed reduction. 98% of vessels visiting the Ports in Q4 2019 slowed down to 12 knots within 20 nautical miles of Point Fermin, and 94% of vessels slowed within 40 nautical miles.
- **Ship Incentive Programs.** The Ports continue to collaborate with other West Coast ports, as well as our local air district on ways to enhance participation in our clean ship incentive programs.
- **At Berth Regulation.** The California Air Resources Board (CARB) released the Initial Statement of Reasons for the new At Berth Regulation on October 15, which included the proposed regulation order. On December 5, 2019 CARB Staff updated their Board on the proposed At Berth Regulation. The Ports attended the Board Hearing, submitted a joint comment letter, and provided oral testimony on the proposed regulation. CARB plans to hold a webinar in January 2020 to discuss suggested changes to the proposed At Berth Regulation based on Board direction during the December 5, 2019 Board

Hearing. The Ports will continue to actively work with CARB on this effort and meet with Port stakeholders throughout 2020.

WORKSHOPS

- The Ports held a Tenant Outreach Grant Workshop for Marine Terminal and Harbor Craft Operators on Thursday, November 14th, 2019 at the Port of Long Beach Maintenance Facility. The Ports provided information on various funding opportunities and how we can help the operators receive grant funding for deploying advanced technologies at their facilities.
- The Ports hosted a Hydrogen Fuel Cell Lunch and Learn event on Wednesday, November 20, 2019 at the Port of Long Beach Maintenance Facility for Marine Terminal Operators. This Event was organized and paid for by the California Hydrogen Business Council and it provided information on the potential of hydrogen and fuel cells as a zero emission solution for cargo handling equipment
- The Ports held a Rate Study Workshop for all Clean Air Action Plan Stakeholders on Wednesday, December 18, 2019 at the Port of Long Beach Civic Chambers. This workshop was designed to provide a proposed rate structure that would help to accelerate the conversion of the San Pedro Bay truck fleet to the cleaner Low-NOx and Zero Emission models.

OTHER

- **Technology Advancement Program (TAP).** In 2018, the Ports issued a call for projects (CFP) through the TAP. Four proposals were selected by the Ports. The for the *Effenco Rapid Deployment of Electric Active Stop-Start™ Technology for Zero-Emission Idling from Port Yard Tractors Project* project is underway. The Project contract for the electric-drive tugboat project with Harley Marine Services was approved by the Boards in Fourth Quarter 2019. The remaining two projects are two Pasha ocean-going vessel projects (one repower and one new build) and will be considered by the Boards in First Quarter 2020.
- **Air Monitoring Program.** In December, the Ports launched a redesigned air monitoring website (<https://monitoring.cleanairactionplan.org>). The new website features an updated interface that allows for the viewing of multiple air quality parameters or data from multiple stations simultaneously for quick visual comparison. In addition the website facilitates the acquisition of historical air monitoring data from both Ports.

PLANNED ACTIONS NEXT QUARTER

- Hold the next CAAP Implementation Advisory Working Group on January 15, 2020 and solicit feedback on the Ports' Clean Trucks Fund Rate Study and Rate proposal.
- Receive all comments on the Clean Truck Fund Rate Study by January 31, 2020, finalize the document and release on the CAAP Website.
- Seek respective Boards of Harbor Commissioners' approval of a Clean Truck Program Rate to be charged on loaded containers hauled by drayage trucks in and out of the marine terminals at the Ports, with exemptions for movements by trucks meeting cleaner standards.

- Seek approval of new TAP ocean-going vessel projects identified through the Call for Projects.
- Release 2019 TAP Annual Report.
- Release the revised TAP Guidelines, which will be available on the CAAP website.
- Release the new TAP Request for Information (RFI) and Concept Paper, which will be available on the CAAP website.